

Commercial Plan Review - Energy Compliance Worksheet

Applies to new construction, additions, alterations, renovations, repairs and changes of use for commercial buildings, systems and equipment. Commercial buildings are all buildings except detached one- and two- family dwellings, multiple single-family dwellings (townhouses) as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane. Information on construction documents shall comply with MN Rules 1323.0100 Subp. 10. When commissioning is required, it shall be specified in construction documents prior to permit approval.

Project: _____ Address: _____

■ **Project Information:** Select all that apply.

- ☐ New Construction ☐ Alteration ☐ Change in Space Conditioning
☐ Addition ☐ Change in Use

■ **Energy Code Exceptions:** The following conditions are not required to comply with this code if the energy use of the building is not increased: select if applies.

- ☐ Storm windows installed over existing ☐ Reroofing without exposing sheathing or insulation
☐ Glass-only replacement ☐ Alteration replacing <50% light fixtures
☐ Vestibule exception for existing door replacement ☐ Bulb and Ballast ONLY replacement
☐ Existing ceiling, wall, and/or floor cavities exposed and filled with insulation ☐ Existing ceiling, wall, and/or floor cavities NOT exposed

■ **Building and Occupancy Type Compliance:** *Residential buildings* shall meet the provisions of IECC-Residential Provisions (RE), MSBC Ch. 1322. *Commercial buildings* shall meet the provisions of IECC—Commercial Provisions (CE), MSBC Ch. 1323. For *Mixed occupancy buildings* which include both residential and commercial occupancies, **each occupancy shall be separately considered and meet the applicable provisions of IECC - Commercial Provisions (MSBC 1323) and IECC - Residential Provisions (MSBC 1322) specific the occupancy.**

Indicate all that apply:

- ☐ **Commercial Building** *For this code, all buildings that are not included in the definition of Residential Building.*
☐ **Residential Building** *For this code, includes detached one- and two-family dwellings and multiple single family dwellings (townhouses) as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane.*
☐ **Mixed Occupancy Building** *Where a building includes both residential and commercial occupancies, each occupancy shall be separately considered and meet the applicable provisions of Chapter 1322 and Chapter 1323.*

■ **System Commissioning:** Indicate whether System Commissioning is required for the project based on compliance method. Prior to issuance of building permit, the name of the individual or company that will provide the system commissioning must be provided and acknowledged by the project owner. Commissioning is required to be completed prior to final inspection.

- ☐ Yes ☐ No

ENERGY CODE COMPLIANCE DRAWING SHEET(S) For all compliance methods

Submit separate energy code compliance drawing sheet(s) with the following components:

- ☐ Narrative explanation of energy code compliance approach
☐ Drawings depicting the thermal envelope and continuous air barrier
☐ Schedule of energy-related features, including building construction components, building services and equipment, prescribed or used in the compliance calculations and analysis. For each item, list:
 ■ The U-value, R-value, or other relevant energy metric associated with the item
 ■ The plan sheet or specification section where the item is located in the construction documents.
☐ Narrative explanation of commissioning and project completion requirements per ASHRAE 90.1-2010 or IECC Section 408.

Energy Code Compliance

- STEP 1** Select ONLY ONE compliance method for the entire project using this form. 1a, 1b, 2, or 3
- STEP 2** Under selected compliance method, select ONE option from each section
- STEP 3** Prepare forms, reports or other documentation as indicated for the method and path chosen
- STEP 4** Prepare ENERGY CODE COMPLIANCE DRAWING SHEET(S) see front of worksheet for requirements
- STEP 5** Submit items from Steps 1-4 and other construction documents with permit application package

☐ **1a. ASHRAE Standard Compliance** for NEW COMMERCIAL BUILDINGS, ADDITIONS, ALTERATIONS & REPAIRS

Comply with the provisions of the following ASHRAE 90.1-2010 sections 5-10: Select one option from each section and submit required documentation.

Section 5 Building Envelope

- ☐ PRESCRIPTIVE BUILDING ENVELOPE OPTION
Submit **Standard 90.1-2010: Building Envelope Compliance Forms - Part 1 and Part 2**
- ☐ BUILDING ENVELOPE TRADE-OFF OPTION
Submit **Standard 90.1-2010: Building Envelope Compliance Forms - Part 1** and **COMcheck report** for the ASHRAE building envelope trade-off option

Section 6 Heating, Ventilation and Air Conditioning

- ☐ HVAC SIMPLIFIED APPROACH OPTION
Submit **Standard 90.1-2010: HVAC Compliance Forms - Part 1**
- ☐ HVAC MANDATORY PROVISIONS and PRESCRIPTIVE PATH
Submit **Standard 90.1-2010: HVAC Compliance Forms - Part 2 and Part 3**

Section 7 Service Water Heating

- ☐ PRESCRIPTIVE PATH
Submit **Standard 90.1-2010: Service Water Heating Compliance Forms**

Section 8 Power

Only one compliance path is available for power distribution systems

Section 9 Lighting

- ☐ BUILDING AREA METHOD
Submit **Standard 90.1-2010: Lighting Compliance Forms**
- ☐ SPACE-BY-SPACE METHOD
Submit **Standard 90.1-2010: Lighting Compliance Forms**

Section 10 Other Equipment

Comply with provisions of Section 10.

☐ **1b. ASHRAE Energy Cost Budget Compliance** for NEW BUILDINGS and ADDITION

Comply with the provisions of ASHRAE 90.1 2010 Section 11 Energy Cost Budget. See additional handout for submittal requirements for this compliance method.

☐ **2. IECC Prescriptive Compliance** for NEW BUILDINGS, ADDITIONS, ALTERATIONS & REPAIRS

Comply with the provisions of the following INTERNATIONAL ENERGY CONSERVATION CODE (IECC), MN RULES CHAPTER 1323 sections: Select one option from Section C403.

Section C402 Building Envelope Requirements

Section C403 Building Mechanical Systems

Comply with mandatory provisions and either:

- ☐ Section C403.3 Simple systems
- ☐ Section C403.4 Complex systems

Section C404 Service Water Heating

Section C405 Electrical Power and Lighting Systems

For NEW BUILDINGS ONLY

Section C406 Additional Efficiency Packages

Comply with at least one of the following:

- ☐ Section C406.2 Efficient HVAC Performance
- ☐ Section C406.3 Efficient Lighting System
- ☐ Section C406.4 On-Site Supply of Renewable Energy

Submit COMcheck reports or other documentation to show compliance with IECC for all sections.

☐ **3. IECC Total Building Performance** for NEW BUILDINGS

Comply with the IECC MN RULES CHAPTER 1323 C401.2 (3). See additional handout for submittal requirements for this compliance method.